

# **GRAIN TRANSPORTATION REPORT**

Transportation & Marketing, Agricultural Marketing Service United States Department of Agriculture

**NOVEMBER 27, 2003** 

TM GRAIN TRANSPORT COST INDICATORS*	Truck	Rail	Barge	C	cean
11/26/03	100	245	104	<b>Gulf 207</b>	Pacific 291
Compared With Last Week	<b></b>	•	<b>+</b>	<b></b>	<b></b>
*Indicator: Base Year 2000=100; W	Veekly Update	s include Truc	k=Diesel; Rail	=Nearby S	econdary Rail

Market; Barge=Spot Illinois River Basis; Ocean Vessel based on Routes to Japan

Dec. 10-12	American Seed Trade Association (ASTA) & 33rd Soybean Seed and 58th Corn &	Chicago, IL	703-837-8140 (ph) 703-837-9365 (fax)
Jan. 10-14, '04	American Farm Bureau, 85th Convention	Honolulu, HI	202-484-3600 www.fb.com
Jan. 23-27, '04	2004 Wheat Industry Conference	Atlanta, GA	202-547-7800 (ph) 202-546-2638 (fax)
Feb. 1-3, '04	Minnesota Grain and Feed Association Convention	St. Paul, MN	612-339-5043
Feb. 2-3, '04	New England Grain & Feed Council Convention	Boston, MA	207-622-3940
Feb. 8-10, '04	U.S. Grains Council 44th Membership	New Orleans, LA	202-789-0789 grains@grains.org
Feb. 15-17, '04	Grain & Feed Association of Illinois 111th Annual Convention & Trade Show	Peoria, IL	217-787-2417
Feb. 16-18, '04	9th Annual National Ethanol Conference	Miami, FL	202-289-3835 info@ethnolifa.org
Feb. 19-20, '04	Agricultural Outlook Forum 2004	Arlington, VA	Raymond Bridge 202-720-5447
Mar. 2-4, ' 04	2004 Commodity Classic National Corn Growers Assoc. (NCGA)	Las Vegas, NV	Dave Burmeister 314-576-1770
Mar. 31-Apr. 3, '04	California Grain & Feed Association Convention	Palm Springs, CA	760-320-6868
June 10-12, '04	Colorado Grain & Feed Association Convention	Denver, CO	303-438-6600

Report is prepared by Deen Olowolayemo, Johnny Hill, Karla Martin and Delmy Salin, Agricultural Economists, Transportation & Marketing, Agricultural Marketing Service, USDA (202) 690-1304. Support provided by Upper Great Plains Transportation Institute, North Dakota State University. This report can be found on the Internet at www.ams.usda.gov/tmd/grain.htm. E-

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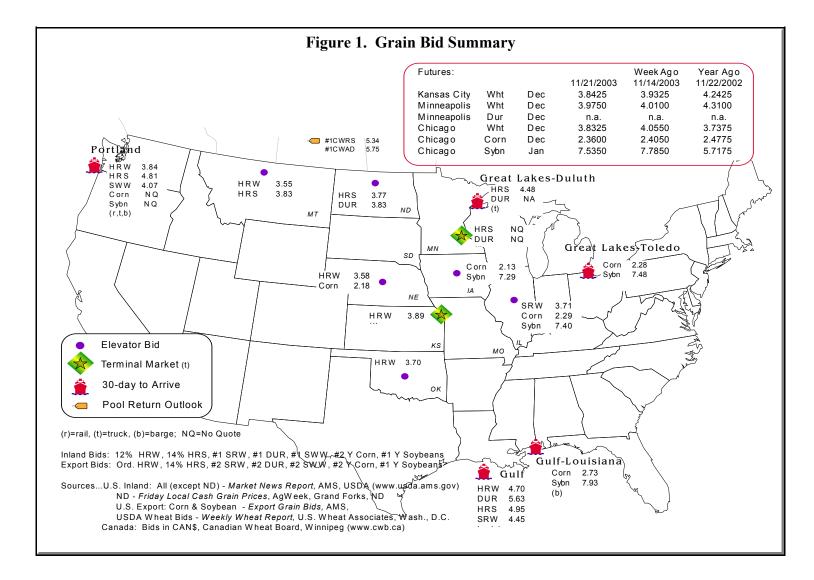
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The Grain Transportation Report is a weekly news source for grain logistics. Detailed data and trend information on five major modes: barge, truck, rail, container, and vessel, provide timely insight into grain transport. The report is offered to policymakers and industry as a tool in day-to-day decision making and longer-term strategic planning for an effective and efficient U.S. grain logistics system.

Table 1-- Market update: U.S. origins to export position price spreads (per bushel)

Commodity	OriginDestination	This week	Last week
Corn	IL Gulf	-0.44	-0.48
Corn	NE Gulf	-0.55	-0.54
Soybean	IA Gulf	-0.64	-0.59
HRW	KS Gulf	-0.81	-0.76
HRS	ND Portland	-1.04	-1.26

The **Grain Bid Summary** illustrates the market relationships for commodities. Positive and negative adjustments in differential between terminal and futures markets, and the relationship to inland market points, are indicators of changes in fundamental market supply and demand. The map may be used to monitor market and time differentials.

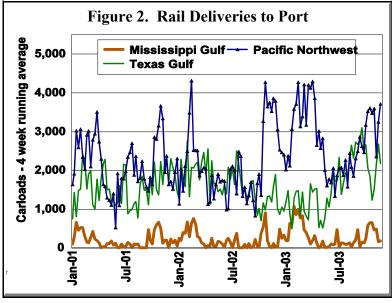


#### **RAIL TRANSPORTATION**

Table 2--Rail deliveries to port (carloads)

	Mississippi Gulf*	<b>Texas Gulf</b>	Pacific Northwest	Atlantic & East Gulf	Total
Week Ending:					
11/12/03	166	2,683	3,256	1,276	7,381
11/19/03	183	2,180	3,715	327	6,405
2003 YTD	14,074	76,364	128,665	16,340	235,443
2002 YTD	9,801	78,848	97,583	18,850	205,082
% 2002 YTD	144%	97%	132%	87%	115%
Total 2002	11,127	85,822	113,857	21,562	232,368
Total 2001	10,022	81,804	111,376	26,604	229,806

Source: Transportation & Marketing/AMS/USDA; (\*) Incomplete Data



Railroads originate approximately 40% of U.S. grain shipments. Trends in these loadings are indicative of market conditions and expectations.

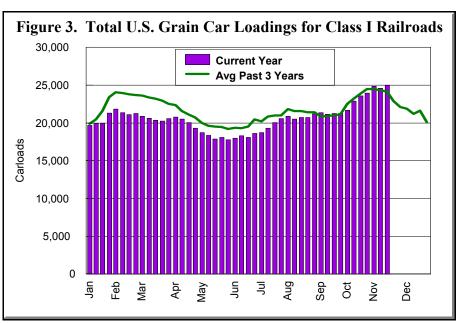


Table 3--Class I rail carrier grain car bulletin (Grain carloads originated)

_	E	ast	West		U.S. T		al Canada	
	CSXT	NS	BNSF	KCS	UP		CN	CP
11/15/03	3,663	3,969	10,961	688	6,847	26,128	4,457	4,620
This Week Last Year	2,941	3,955	9,653	450	6,286	23,285	2,862	4,037
2003 YTD	128,463	150,439	359,279	20,622	301,772	960,575	169,770	171,670
2002 YTD	126,504	145,750	351,997	23,713	303,692	951,656	174,362	175,674
% 2002 YTD	102%	103%	102%	87%	99%	101%	97%	98%
2002 Total	142,760	164,745	400,179	27,161	344,296	1,079,141	191,835	195,765

# $\underline{U.S.\ rail\ covered\ hopper\ cars\ online\ index}^{\star}$

Oct-03 95.1	99.1	96.3	87.7	96.9	96.6
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Source: Association of American Railroads; \*Base Year = 2001, Index based on Number of Covered Hopper Cars Online (available for Service).



Table 4--Tariff rail rates for unit train shipments\*

Date				Rate	Rate per	Rate/per
effective	Commodity	Origin	Destination	per car	MT	bushel**
11/03/03	Wheat	Kansas City, MO	Galveston, TX	\$1,820	\$20.06	\$0.55
11/03/03	Wheat	Minneapolis, MN	Portland, OR	\$4,148	\$45.72	\$1.24
11/03/03	Wheat	St. Louis, MO	Houston, TX	\$1,945	\$21.44	\$0.58
11/03/03	Wheat	Kansas City, MO	Laredo, TX	\$2,280	\$25.13	\$0.68
11/03/03	Wheat	Chicago, IL	Albany, NY	\$1,834	\$20.22	\$0.55
11/03/03	Corn	Minneapolis, MN	Portland, OR	\$3,130	\$34.50	\$0.88
11/03/03	Corn	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.77
11/03/03	Corn	Council Bluffs, IA	Baton Rouge, LA	\$2,170	\$23.92	\$0.61
11/03/03	Corn	Evansville, IN	Raleigh, NC	\$1,886	\$20.79	\$0.53
11/03/03	Corn	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.80
11/03/03	Soybean	Minneapolis, MN	Portland, OR	\$3,110	\$34.28	\$0.93
11/03/03	Soybeans	Chicago, IL	Baton Rouge, LA	\$2,736	\$30.16	\$0.82
11/03/03	Soybeans	Council Bluffs, IA	Baton Rouge, LA	\$2,799	\$30.85	\$0.84
11/03/03	Soybeans	Des Moines, IA	Laredo, TX	\$2,864	\$31.57	\$0.86
11/03/03	Soybeans	Evansville, IN	Raleigh, NC	\$1,886	\$20.79	\$0.57

Sources: www.bnsf.com, www.cpr.ca, www.csx.com, www.uprr.com

<sup>\*</sup>A unit train refers to shipments of at least 52 cars.

<sup>\*\*</sup>Approximate load per car = 100 tons: Corn 56 lbs/bu, Wheat & Soybeans 60 lbs/bu\*

Table 5--Secondary rail car market,

Average premium/discount to tariff, \$/car - last week

	Delivery Period				
	Jan-04	Feb-04	Mar-04		
BNSF-GF	\$203	\$108	\$71		
UP-Pool	\$96	\$60	\$41		

Rail service may be ordered directly from the railroad via **Auction** for guaranteed service or tariff for non-guaranteed service, or through the secondary market. The **Secondary Rail Market** information reflects trade values for service that was originally purchased from the railroad carrier as some form of guaranteed freight. The auction and secondary rail values are indicators of rail service quality and demand/supply.

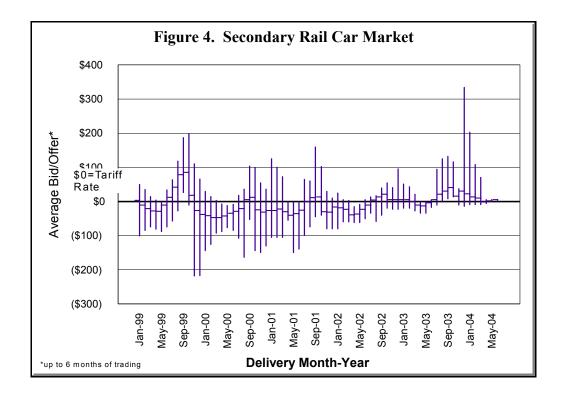
Table 6--Railroad car 'Auction' results

Average premium/discount to tariff, \$/car - last auction

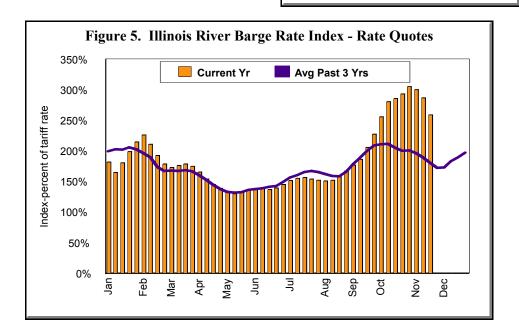
Delivery for:	Jan-04	Feb-04	Mar-04
COT/N. Grain	no bid	\$152	\$35
COT/S. Grain	no bid	\$123	\$58
GCAS/Region 1	\$131	\$35	no bid
GCAS/Region 2	\$178	\$123	no bid

Source: Transportation & Marketing/AMS/USDA.

COT=Certificate of Transportation; GCAS=Grain Car Allocation System



#### **BARGE TRANSPORTATION**



The Illinois River Barge Rate Index averaged 183% of the Benchmark Tariff Rate between 1999 and 2001, based on weekly market quotes. The Index, along with Rate Quotes and Futures Market bids are indicators of grain transport supply and demand.

Calculating **Barge Rate** Per Ton: Index × 1976 Tariff Benchmark Rate per Ton

Select applicable index from market quotes included in tables on this page. The 1976 benchmark rates per ton are provided in map below.

Table 7-- Barge rate quotes: Southbound barge freight

Index=percent of tariff, based on 1976 tariff benchmark rate

Location	11/19/03	11/12/03	Dec '03	Feb '04
Twin Cities	236	236	nq	nq
Mid-Mississippi	209	228	210	nq
Illinois River	193	214	192	189
St. Louis	149	167	149	147
Lower Ohio	151	204	150	149
Cairo-Memphis	135	164	136	132

Source: Transportation & Marketing/AMS/USDA

**Table 8--Barge futures market**Southbound barge freight nominal/cash basis values
Index=percent of tariff, based on 1976 tariff benchmark rate

Week		Contract	Rate		
ended	River/region	period	futures	cash	
11/25/03	St. Louis	Dec.	n/a	150	
		Feb.	n/a	150	
		Apr.	n/a	145	
		May	n/a	145	
		June	n/a	145	
	Illinois River	Dec.	n/a	190	
		Feb.	n/a	195	
		Apr.	n/a	160	
		May	n/a	153	
		June	n/a	160	

Minneapolis
6.19
Davenport
5.32
Peoria
4.81 Cincinnati
3.99
Owensboro
4.04

Greenville
3.14
2.29

Figure 6. Benchmark Tariff Rates

Source: St. Louis Merchants Exchange

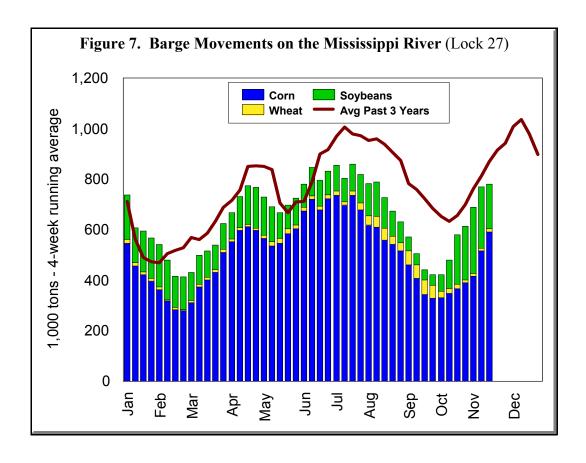


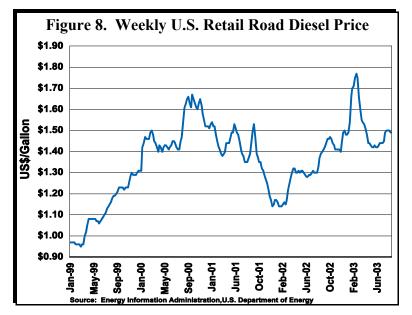
Table 9--Barge grain movements (1,000 tons)

Week ending 11/15/03	Corn	Wht	Sybn	Total
Mississippi River				
Rock Island, IL (L15)	313	2	59	374
Winfield, MO (L25)	395	6	77	478
Alton, IL (L26)	618	13	102	736
Granite City, IL (L27)	623 11		106	745
Illinois River (L8)	209	3	24	238
Ohio River (L52)	42	6	71	120
Arkansas River (L1)	0	7	41	48
2003 YTD	25,180	2,517	7,751	36,076
2002 YTD	30,219	2,348	9,903	43,860
% 2002 YTD	84%	108%	79%	83%
2002 Total	35,066	2,590	11,634	50,810

Source: U.S. Army Corp of Engineers

YTD and Calendar year total includes Miss/27, Ohio/52 and Ark/1.

## TRUCK TRANSPORTATION



The weekly **Diesel Price** provides a proxy for trends in U.S truck rates. Diesel fuel is a significant expense for truck grain movements, accounting for 37% of the estimated variable cost. **Crude Oil Price** is an indicator in future diesel price trends.

Light Sweet Crude is exchanged on the New York Mercantile Exchange. North Sea oil has a "benchmark" role in crude oil pricing. Brent crude, a blend of North Sea oils, is traded on the International Petroleum Exchange in London.

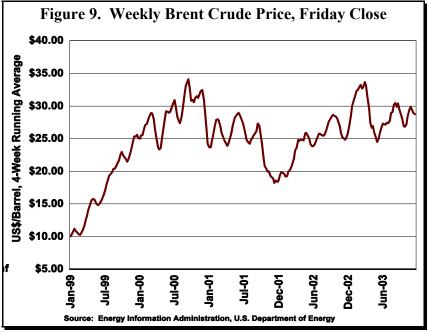


Table 10--Crude oil prices (US\$ per Barrel)-11/18/03

Туре	This week	Last week	Change
Light Sweet Crude (NYMEX)	n/a	28.82	n/a
Brent Crude	n/a	32.49	n/a

#### **GRAIN EXPORTS**

Table 11--U.S. export balances (1,000 Metric Tons)

Wheat							Com	Carrhaan	Total
Unshipped export balance	HRW	SRW	HRS	SWW	DUR	All Wheat	Corn	Soybean	Total
11/13/03	2,688	597	1,010	649	148	5,091	10,243	10,600	25,934
This Week Year Ago	1,427	789	1,555	876	165	4,812	8,119	7,513	20,444
Cumulative Exports-Crop Y	Cumulative Exports-Crop Year								
2003/04 YTD	5,535	1,946	3,170	1,992	602	13,245	8,975	7,465	29,685
2002/03 YTD	3,887	1,275	3,291	1,667	426	10,545	7,322	6,673	24,540
% 2002/03 YTD	142%	153%	96%	1	141%	126%	123%	112%	121%
2001/02 Total	8,761	5,485	5,582	3,175	1,133	24,135	48,003	29,926	102,064
2000/01 Total	9,314	4,445	5,775	5,156	1,130	25,819	47,734	27,567	101,120

Source: Foreign Agricultural Service/USDA; YTD: Year-to-Date; Crop Year: Wheat=5/31-6/01, Corn & Soybeans=9/01-8/31

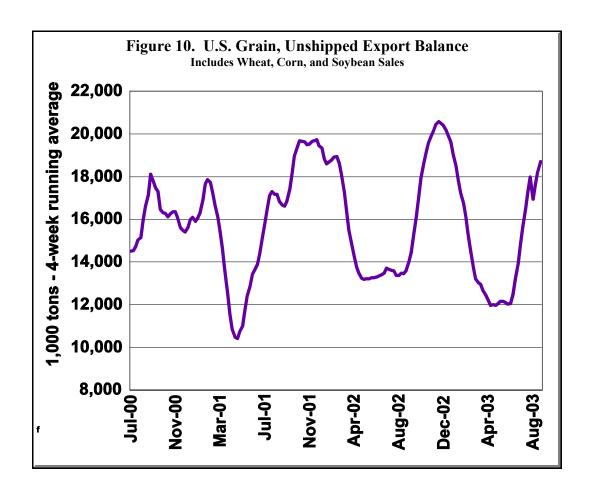
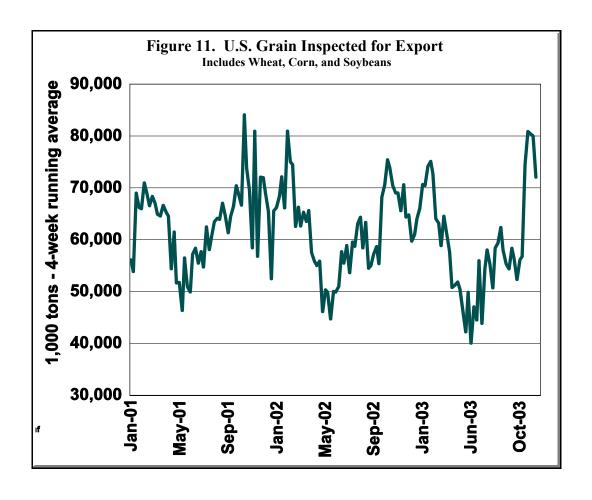


Table 12--Select U.S. port regions - grain inspections for export (1,000 metric tons)

Date	Pac	ific Re	gion	Miss	sissippi	<u>Gulf</u>	<u>T</u> (	exas Gi	ul <u>f</u>	Por	rt Region Tota	<u>ıl</u>
	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Wheat	Corn	Soybn	Pacific	Mississippi	Texas
11/20/03	196	87	234	140	714	568	199	29	0	517	1,422	228
2003 YTD	8,056	4,698	4,500	5,519	26,720	15,918	6,205	678	94	17,253	48,156	6,977
2002 YTD	8,120	3,525	2,612	5,194	33,014	15,887	5,276	261	373	14,257	54,096	5,910
% 2002 YTD	99%	133%	172%	106%	81%	100%	118%	260%	25%	121%	89%	118%
2002 Total	9,128	3,994	2,870	5,670	36,383	18,549	5,875	266	373	15,992	60,602	6,514

Source: Federal Grain Inspection Service YTD-Year-to-Date



The U.S. Exports Approximately One-Quarter of the Grain it Produces. On average, it includes nearly 45% of U.S. grown wheat, 35% of U.S. grown soybeans, and 20% of the U.S. grown corn.

Over 60% of these U.S. export grain shipments departed through Louisiana Gulf region in 2002.

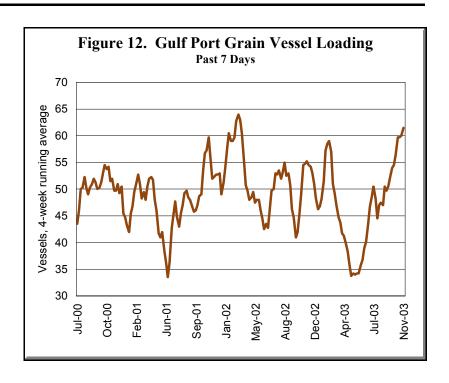


Table 13--Weekly port region grain ocean vessel activity (number of vessels)

Date		Gulf		Pacific Northwest	Vancouver B.C.
	<u>In Port</u>	Loaded <u>7-Days</u>	Due Next 10-Days	<u>In Port</u>	<u>In Port</u>
11/13/03	37	57	83	10	13
11/20/03	33	67	78	8	3
2002 Range	(1555)	(3366)	(4482)	(315)	(012)
2002 Avg	35	51	65	8	5

Source: Transportation & Marketing/AMS/ USDA

Table 14--Quarterly ocean freight rates (average rates & percentage changes, U.S. dollars/metric ton)

	<i>J</i>		(		,	, , , , , , , , , , , , , , , , , , , ,
	2003 3 <sup>rd</sup> Qtr	2002 3 <sup>rd</sup> Qtr	Change %	2003 3 <sup>rd</sup> Q		Change %
Gulf to				Pacific NW to		
Japan	\$33.83	\$19.54	73%	Japan -	\$11.57	-
Mexico	-	\$7.25	-	Taiwan \$19.5	50 \$11.21	73%
Taiwan	\$33.00	-	-			
N. Europe	\$22.88	-	-	Argentina/Brazil to		
N. Africa	\$25.50	\$13.50	89%	Med. Sea \$33.3	\$8 \$19.93	67%
Med. Sea	\$24.88	\$11.92	109%	N. Europe \$22.5	\$18.65	21%
				China \$34.7	<b>'</b> 5 -	-

Source: Transportation & Marketing/AMS/USDA

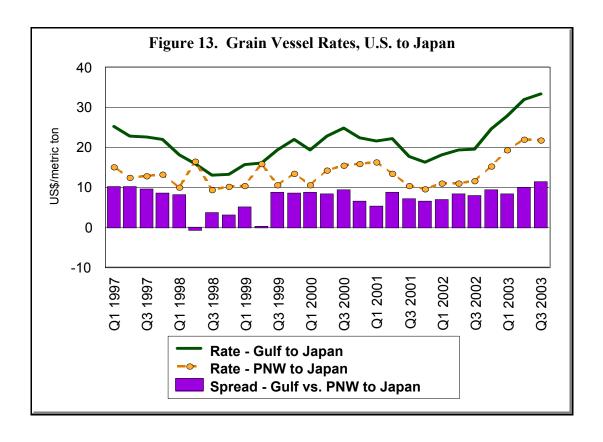


Table 15--Ocean freight rates for selected shipments

Week Ending 11/22/03

Export region	Import region	Grain	Month	Volume loaded (Tons)	Freight rate (\$/ton)
U.S. Gulf	Morocco	Hvy Grain	Nov25/Dec 5	30,000	\$35.00
U.S. Gulf	Ghana	Wheat	Oct 20/30	15,000	\$42.65*
U.S. Gulf	Taiwan	Hvy Grain	Nov 5/18	44,000/46,000	\$44.00
U.S. Gulf	Japan	Hvy Grain	Nov 1/10	42,000/44,000	\$38.80
U.S. Gulf	Kenya	Corn	Nov 10/20	55,000	\$45.00
U.S. Gulf	China	Hvy Grain	Nov 25/30	55,000	\$45.00
Brazil	Italy	Meals	Nov25/30	20,000	\$38.50

Source: Maritime Research Inc.

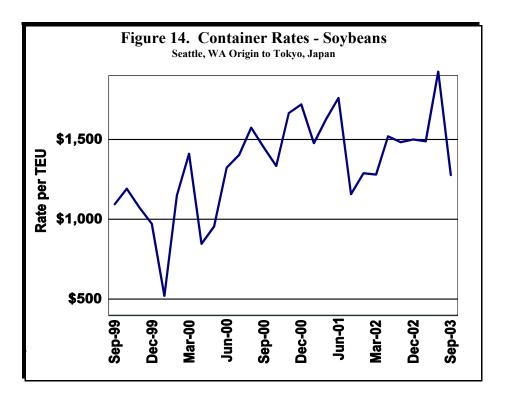
Rates shown are for metric ton (2,204.62 lbs.=one metric ton), F.O.B., except where otherwise indicated; op=option

<sup>\*</sup>Most food aid from the United States is required to be shipped on U.S. flag vessels. The vessels are of limited availability resulting in higher rates. In addition, destinations receiving food aid generally lack adequate port unloading facilities, requiring the vessel to remain in port for a longer duration than normal.

# **CONTAINER**

## **Container Ocean Freight Rates**

Average rate per twenty-equivalent-unit (TEU), weighed by shipping line market share Source: Transportation & Marketing/AMS/USDA, Quarterly Updates



Approximately 420,000 MT of grain and oilseed exports were marketed via container in 2001. This volume increased 26% compared to 1997.

